



Technical Data Sheet

BC BITU-GOLD 180

Torch-Applied SBS Modified Bituminous Waterproofing Membrane

1. Product Description

BC Bitu-Gold 180 is a high-performance, pre-fabricated, torch-applied waterproofing membrane made from premium-grade bitumen modified with Styrene-Butadiene-Styrene (SBS) polymers, providing exceptional elasticity, flexibility, and resistance to ageing.

Reinforced with a 180 g/m² non-woven polyester mat, the membrane ensures superior tensile strength, dimensional stability, and crack-bridging ability.

2. Application Areas

BC Bitu-Gold 180 is suitable for waterproofing and damp-proofing applications in a variety of demanding environments, including:

- Foundations, retaining walls, and basements (including permanent water submersion)
- Pile caps and raft foundations
- Flat and sloped roofs
- Balconies, terraces, and wet areas
- Exposed roofing systems (recommended two-layer system with top mineral or aluminum finish)
- Podiums, planter boxes, and bridge decks

3. Product Features

- SBS-modified for excellent flexibility and elongation
- Cold flexibility up to -10°C, ideal for extreme weather conditions
- High tensile strength and tear resistance for durable performance
- Superior adhesion to various primed substrates
- Excellent resistance to salts, alkalis, and environmental conditions
- High puncture and impact resistance
- Enhanced durability and long-term waterproofing integrity



4. Technical Properties – BC Bitu-Gold 180

Property	Typical Value	Test Method
Reinforcement	Non-woven polyester 180 g/m ²	ASTM D5147
Cold Flexibility	-10°C	ASTM D5147
Max. Tensile Force @ 23±2°C (Longitudinal)	900 N/5 cm	ASTM D5147 / UEAtc
Max. Tensile Force @ 23±2°C (Transversal)	700 N/5 cm	ASTM D5147 / UEAtc
Ultimate Elongation (Longitudinal)	50%	ASTM D5147 / UEAtc
Ultimate Elongation (Transversal)	50%	ASTM D5147 / UEAtc
Shear Resistance of Joints (Longitudinal)	750 N/5 cm	UEAtc
Shear Resistance of Joints (Transversal)	550 N/5 cm	UEAtc
Tear Strength (Longitudinal)	500 N	ASTM D4073
Softening Point (Ring & Ball)	130–140°C	ASTM D36
Penetration @ 25°C (Mixture)	20–30 dmm	ASTM D5
Static Load Puncture Resistance	L25	UEAtc
Impact Resistance	110	UEAtc
Resistance to Puncture	1000 N	ASTM E154
Water Absorption (24 hrs @ 25°C)	<3.2%	ASTM D5147



5. Tools Required

- Propane gas torch and gas cylinder
- Knife or cutter
- Measuring tape and marking string
- Trowel or steel float
- Roller or wooden pressing tool

6. Installation Guidelines

Surface Preparation

- Ensure substrate is dry, clean, and free of dust, oil, and loose materials.
- Fill cracks and imperfections with approved filler or mortar.
- Apply BC Bituminous Primer (ASTM D41 compliant) and allow to dry completely.

Membrane Application

1. Unroll and align the BC Bitu-Gold 180 membrane.
2. Re-roll halfway, then torch the underside uniformly until the polyethylene film melts.
3. Press firmly to ensure complete adhesion and bonding to the substrate.
4. Overlap edges by minimum 10 cm on sides and 15 cm at ends.
5. Ensure molten bitumen visibly flows at seams, confirming proper bonding.
6. Pre-detail corners, edges, and penetrations before general application.
7. For exposed roofs, use mineral or aluminum-finished variants.

7. Application Limitations

- Do not apply on damp, wet, or frozen substrates.
- Avoid installation during rainfall or high humidity.
- Do not overheat or burn the membrane during torching.
- Use appropriate PPE (heat-resistant gloves, safety glasses, and non-slip footwear).



8. Packaging & Storage

- Supplied in standard rolls, palletized, and shrink-wrapped.
- Store rolls vertically in a cool, dry, and shaded area.
- Keep away from direct sunlight, frost, and excessive heat sources.
- Shelf Life: 12 months in original, unopened packaging under recommended storage conditions.

9. Health & Safety

- Use fire-resistant PPE during torching.
- Ensure adequate ventilation to prevent inhalation of fumes.
- Avoid direct contact with hot bitumen or flame.
- Handle rolls carefully to avoid physical injury.
- Follow all site safety procedures and local fire regulations.

10. Available Sizes

Thickness	Width x Length	Finish Options
3 mm	1 x 10 m	Sand / Polyethylene film
4 mm	1 x 10 m	Mineral / Aluminum / Sand
5 mm	1 x 8 m	Mineral / Aluminum

DISCLAIMER

The data presented in this sheet are based on laboratory testing and practical experience. Variations in substrate, application method, and environmental conditions may impact performance. Users are advised to carry out tests under their own conditions. Building Chemistry Industry's responsibility is limited to the product replacement in cases of proven manufacturing defect.

